



# CONSTRUCTION EQUIPMENT

## VOLVO A40G 752073 - DIESEL ENGINE



**Sample No:** VCP439654  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP439654</b>	VCP444108	VCP433435	---
Sample Date	<b>08 Jun 2024</b>	12 Mar 2024	30 Nov 2023	---
Machine Hours	<b>1792</b>	1131	527	---
Oil Hours	<b>0</b>	500	527	---
Oil Changed	<b>Changed</b>	Changed	Changed	---
Sample Status	<b>ATTENTION</b>	ATTENTION	ATTENTION	---

### RIPA AND ASSOCIATES

10149 FISHER AVENUE  
 TAMPA, FL  
 US 33619  
 Contact: PM Services  
 PMServices@ripaconstruction.com  
 T:  
 F:



### OIL CONDITION

Visc @ 100°C	cSt	<b>12.0</b>	12.2	11.0	---
Base Number (BN)	mg KOH/g	<b>8.7</b>	8.3	5.4	---
Oxidation (PA)	%	<b>74</b>	76	56	---

### Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	---
Soot %	%	<b>0.2</b>	0.2	0.2	---
Nitration (PA)	%	<b>64</b>	68	83	---
Sulfation (PA)	%	<b>59</b>	60	52	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>&lt;1.0</b>	<1.0	0.4	---
Silicon	ppm	<b>8</b>	10	30	---
Sodium	ppm	<b>&lt;1</b>	2	2	---
Potassium	ppm	<b>1</b>	<1	5	---



### WEAR METALS

Iron	ppm	<b>8</b>	10	17	---
Copper	ppm	<b>10</b>	54	281	---
Lead	ppm	<b>&lt;1</b>	1	3	---
Tin	ppm	<b>1</b>	<1	3	---
Aluminum	ppm	<b>2</b>	2	2	---
Chromium	ppm	<b>&lt;1</b>	<1	0	---
Molybdenum	ppm	<b>42</b>	50	84	---
Nickel	ppm	<b>&lt;1</b>	2	2	---
Titanium	ppm	<b>&lt;1</b>	<1	0	---
Silver	ppm	<b>0</b>	0	0	---
Manganese	ppm	<b>&lt;1</b>	<1	2	---
Vanadium	ppm	<b>0</b>	<1	<1	---



### ADDITIVES

Calcium	ppm	<b>1485</b>	1846	2132	---
Magnesium	ppm	<b>536</b>	554	61	---
Zinc	ppm	<b>1063</b>	1249	1233	---
Phosphorus	ppm	<b>820</b>	1019	1048	---
Barium	ppm	<b>0</b>	0	0	---
Boron	ppm	<b>28</b>	27	32	---

**Depot:** RIPTAM  
**Unique No:** 11077130  
**Signed:** Don Baldrige  
**Report Date:** 17 Jun 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS

